SOME NEW BOOKS.

Herbert Spencer's Latest Book.

In a volume of some three hundred pages published by the Appletons will be found a collection of short papers on miscellaneous topics, the origin of which is explained by the author, Mr. HERBERT SPENCER, in a prefatory note. He tells us that during the years spent in writing various systematic works there came to him from time to time ideas not fitted for incorporation in those treatises. Many of these ideas have found places in articles published in reviews, and have since been brought together in three published volumes of essays. There remained, however, a number of observations and reflections, some of which the author deems important, while others are regarded by him as relatively trivial. It is these *Facts and Comments*, or rather a large part of them, which are set forth in the book before us.

One of the most interesting papers in the volume is the penultimate one, which undertakes to answer the perplexing question, What should the sceptic say to believers? It is, as the author points out, no reply to say that one ought always to be sincere, for there is such a thing as a blatant and mischievous sincerity, as well as a tolerant, or wisely reticent sincerity. The real question is, Which kind of sincerity should be exhibited? and we need no philosopher to teach us that we should be guided by circumstances, chief among which is the mental calibre and moral condition of our interlocutor. The agnostic is cautioned not to proceed invariably on the assumption that in all cases a secular creed may with advantage forthwith replace the creed distinguished as sacred. It is not true that the exposition of a system of natural ethics will suffice to produce the required self-control on the part of all those to whom it is expounded. The assumption presupposes a general intelligence capable of seeing the beneficial outcome of certain modes of conduct currently recognized as right, and the evil outcome of opposite modes of conduct. It also presupposes that, having perceived the good results of this kind and the bad results of that kind of conduct, men will adopt the one and reject the other. As a matter of fact, "the average intellect cannot grasp a demonstration, even when the matter is concrete, and still less when the matter is abstract. It cannot bear in mind the successive propositions, but collapses under the weight of them before reaching the conclusion." Dogmatic teaching alone is effective with such an intellect, and even this often fails. Thus the dogma "Honesty is the best policy" is commonly inoperative on the thief, since he always expects to escape detection. Again: "The hope that average men may be swayed by the contemplation of advantage to society is utterly utopian. In the minds of those who form the slum population and most of those immediately above them will arise the thought, 'I don't care a damn for society.' At the other end of the social scale, among those whose lives alternate between clubrooms and game preserves, there will arise, if not so coarsely expressed, a thought, yet the thought, 'Society as it is serves my purpose very well, and that's enough for me.' Ethical teaching, however conclusive, has no effect on natures which have made little approach toward harmony with it." It follows that the agnostic who thinks that he can provide forthwith adequate guidance for the mass of mankind by setting forth a natural code of right conduct, duly illustrated, is under an illusion.

Does this amount to saying that the old creed should be left in possession? Mr. Spencer answers that, unfortunately, the religious creed apears to be scarcely more operative than the ethical creed would be. "It needs but to glance over the world and contemplate the doings of so-called Christians everywhere to be amazed at the ineffectiveness of the current theology." Here and there are some superior natures on whom the religious sanctions and reprobations so far reenforce natural promptings as to have beneficial effects. On the whole, however, "something rudely analogous to the law in the physical world that attraction varies inversely as the square of the distance, seems to hold in the moral world: so that proximate pleasures and pains, even trifling, influence actions more than immeasurably greater pleasures and pains that are remote." If we recall the transgressions of adulterating tradesmen, bribed agents, dishonest lawyers and corrupt financiers, to say nothing of thieves and murderers, we see that the alternative prospects of eternal torture and eternal bliss sway mankind but little. Ill-grounded, therefore, as may be the agnostic's hope that a system of natural ethics will at once yield good guidance, Mr. Spencer would not accept the inference that endeavors to substitute such a system for the supernatural system, with its penalties and rewards, would injure the average man. He is, indeed, disposed to think that such a substitution might benefit the average man by showing the agreement between the naturally derived sanctions and most of those sanctions supposed to be supernaturally derived. There are even, in our author's opinion, cases which present to the agnostic positive reasons for expressing his own changed belief. "While on the great mass of people the current creed appears to be beneficially operative to a very small degree, if at all, there are not a few on whom it is disastrously operative, causing by its threats great misery. To some who are sensitive and have active imaginations, the prospect of eternal torture comes home with terrible effect. Numbers of them continue throughout life to be troubled about their future fate; and in old age, when flagging vitality brings more or less mental depression, this depression takes the shape of fears concerning endless punishment to be presently borne." Mr. Spencer thinks that to all such persons the man who has rejected this dreadful creed may rightly give reasons for doing the like: "Pointing out the blasphemy of supposing that the power manifested in fifty million suns, with their attendant worlds, has a nature which a human being we should shrink from with horror."

This is not, by any means, all, however, that Mr. Spencer has to say upon the subject. He is keenly alive to the fact that, while there are even now some persons, though not so many as there used to be, who are tortured with ideas of future suffering without end, we meet, on the other hand, with not a few who, of a more fortunate disposition, dwell rather upon the promised future happiness; and, by the hope of it, are consoled under the evils they have to bear. "The prospect of heaven makes life tolerable to many who would else find it intolerable. To some whose shattered constitutions and perpetual pains, caused perhaps by undue efforts for the benefit of dependents, the daily thought of a compensating future is the sole assuaging consciousness. Others there are who, borne down in spirit by some grave misunderstanding, look forward to a time when everything will be made clear and their grief changed into joy. Constant ill-treatment from a domestic tyrant brings to not a few unceasing miseries, which are mitigated only by the belief that they will hereafter give place to a state of bliss. And there are many who stagger on under the exhausting burdens of daily duties fulfilled without thanks and without sympathy, who are enabled to bear their ills by the conviction that, after this life, will come a life free from pains and weariness. Nothing but evil can follow a change in the creed of such; and, unless cruelly thoughtless, the agnostic will carefully shun discussion of religious subjects with them." In fine, the course which should be taken by an agnostic is a question to be answered only by a consideration of the special circumstances. "Sympathy commands silence toward all whose sufferings under the ills of life derive comfort from their creed; while it forbids the dropping of hints that may shake their faiths, it suggests the evasion of questions which cannot be discussed without unsettling their hopes."

A paper on "Distinguished Dissenters" has for its text a foolish dictum of the late Matthew Arnold's that "a generation or two outside the Establishment, and Puritanism produces men of national mark no more." The assertion shows what a blinding effect culture, of the literary kind alone, may have. From his dictum it is evident that Mr. Arnold was blind to the importance of scientific discoveries; that he knew nothing of the great revolutions in thought which, in the course of the last century, were produced by Priestley, Dalton, Young and Faraday. Puritanism, he says, "after a generation or two outside the Establishment, produces men of national mark no more;" it only produces men who divide their energies between "business and Bethels." As a matter of fact, the men just named were not only men of national mark, but men of world-wide mark—men whose discoveries affected the mental careers of the scientifically cultured everywhere, while changing the industrial activities of mankind at large. "Consider," says Mr. Spencer, "what would be the state of chemical knowledge had not Priestley discovered oxygen, understanding little though he did the part it plays in the order of nature. Consider where would have been the fabric of chemical combinations in all the enormous perplexities it has reached, in the absence of Dalton's Atomic Theory. Consider what would be the state of astro-physics, and our knowledge of the constitutions of the stars and nebulæ, had not the undulatory theory of light been demonstrated by Young. And consider what would have been our ideas of the electric and magnetic forces and their connections with light, had not Faraday initiated the theory of their correlations, and led the way toward those vast conceptions of universal forces which now pervade physical inquiry, as well as to those vast applications of them which are transforming industry." Mr. Spencer's conclusion is that Mr. Matthew Arnold, by the criticism which his dictum provoked, accomplished unawares the reverse of what he intended. Incidentally, he drew attention to the astounding fact that, during less than a century, four English dissenters did more toward revolutionizing the world's physical conceptions, and, consequently, its activities, than any other four men who can be named.

In a paper on "Exaggerations and Misstatements," Mr. Spencer directs attention to the frequency of misstatements in ordinary conversation—not misstatements of things learned from books, but misstatements of the incidents of daily life, private and public. Passing feelings prompt stronger words than are justifiable, and the desire to interest listeners increases perversions otherwise caused. From minute to minute every one utters needless adjectives and adverbs. "We rarely hear any one say he has a cold; it is nearly always a 'bad' cold, or a 'very bad' cold. If it be a question of weather, than a warm day in spring is spoken of as 'hot,' a description inapplicable save to days in July and August. Supposing it should rain moderately, it is said to be 'pouring,'—a word rightly used only in case of a thunder-shower, or shower like it. Similarly, a little thin ice over the puddles is thought to justify the description 'a hard frost.' If the question concerns the merit or demerit of a person or performance, he or it is represented as much above or much below the average. Conversation is thickly sprinkled with superlatives, and yet it needs but a moment's thought to see that superlatives should occur but rarely, since extreme cases bear but a small ratio to medium cases." Mr. Spencer does not think that criticisms passed on these licenses of speech should be pooh-poohed. Such licenses are manifestations of a habit, and while, for the most part, little or no harm results from them, the *habit* occasionally causes harm that is serious. Our author's own experience has shown him that words carelessly used, even in private letters, may, through a subsequent publication of the letters, never dreamt of when they were written, prove mischievous. Thus in "The Life and Letters of T. H. Huxley," there is a letter in which Prof. Huxley, writing to a German friend, refers to Mr. Spencer in the following words: "I have been *his* devil's advocate for a number of years, and there is no telling how many brilliant speculations I have been the means of choking in an embryonic state." Recognizing that these words might be taken seriously by those readers who should not be critically-minded, Mr. Spencer requested his secretary to compare the original manuscripts of his writings with the printed books. The secretary found that in the two works, "First Principles" and "The Principles of Biology," occupying three volumes, which were seen in proof by Prof. Huxley, there were just four speculative passages in the MSS. which had disappeared from the printed text. One of these, however, was afterward reproduced by Mr. Spencer in an appendix, because good warrant for it had become known. We learn further that out of sixteen volumes published by our author, the three mentioned were the only ones of which Prof. Huxley saw the proofs.

The mischief done by exaggeration is also illustrated by a sentence which occurs in the sketch of Spencer's career and works published by a warmly sympathetic narrator: "Like Aristotle, he has had to delegate large portions of his work to be done for him by others." Mr. Spencer points out that "those who know that the work delegated by Aristotle was the collection of materials for his 'Natural History,' will rightly interpret the reference. But not one reader in ten knows this, and hence wrong inferences will probably be drawn. As my name is especially associated with 'The Synthetic Philosophy,' this sentence will suggest to many the thought that 'large portions' of it were written by deputy. This he did not mean to say. The work to which he referred is entitled 'Descriptive Sociology; or, Groups of Sociological Facts, Classified and Arranged by Herbert Spencer, Compiled and Abstracted by David Duncan, Richard Scheppig and James Collier,' eight parts of which have thus far appeared. Knowing that I should be unable to read all the works of travel and history containing the facts I should need when dealing with the science of society, I engaged these gentlemen—first one, then two, then three—to read up for me, and arrange the extracts they made in the manner prescribed. With much material I had accumulated in the course of many years, I incorporated a much larger amount of material derived from these compilations when writing the 'Principles of Sociology,' and Part II. of the 'Principles of Ethics.'"

If even the sympathetic do mischief by mis-used words, what is to be expected from the antagonistic? In illustration of the extent to which opposition, whether expressed in controversy or otherwise, prompts injurious misrepresentations, Mr. Spencer quotes a passage from the "Letters of Benjamin Jowett," Page 150: "I sometimes think that we Platonists and Idealists are not half so industrious as those repulsive people who only 'believe what they can hold in their hands,' Bain, H. Spencer, &c., who are the very Tuppers of Philosophy." Our author's comment on this passage runs as follows: "I will not ask in what sense the Law of Evolution and sundry generalizations of an abstract kind with which I am identified, can be severally held in my hands, but will interpret this statement in the sense probably intended, as an ascription of materialism. One might have expected that Prof. Jowett, learned in philosophy and practiced in making distinctions, would not have followed in the steps of less cultured theological opponents, whose aspersions I have time after time shown to be groundless. It might have been supposed that since the 'System of Synthetic Philosophy' commences with a division entitled 'The Unknowable,' having for its purpose to show that all material phenomena are manifestations of a Power which transcends our knowledge—that 'force, as we know it, can be regarded only as a conditioned effect of the Unconditioned Cause,'—there had been afforded sufficiently decided proof of belief in something which cannot be held in the hands. Considering that in 'The Principles of Psychology,' I have written—'hence though of the two it seems easier to translate so-called Matter into so-called Spirit, than to translate so-called Spirit into so-called Matter (which latter is, indeed, wholly impossible), yet no translation can carry us beyond our symbols,' I might reasonably have thought that no one would call me a materialist. Still more, after the elaborate analysis contained in Sections 271, 272, showing the untenability of materialism, I should have supposed the repudiation complete. But the charge of materialism is a convenient weapon for theological and philosophical opponents—a weapon which, knocked out of the hand of one, is presently picked up by another—a weapon which Prof. Jowett was not ashamed to use and to join with vilifying words."

To the suggestion that, perhaps, Prof. Jowett did not know of these passages which demonstrated the absurdity of charging the author with materialism, Mr. Spencer replied: "I am not aware that one who condemns an author's opinions is excused because he does not know what those opinions are; rather his ignorance adds to the gravity of his offence. But the excuse, bad though it is, is unavailing, for Prof. Jowett had in his hands the works containing these passages." It seems that Prof. Jowett was one of the original subscribers to "The Synthetic Philosophy," and, when the series had been running for seven years, sent to the publishers a lump sum of £5 to cover future subscriptions. He was the only person who paid subscriptions in advance. Mr. Spencer suggests that here is a psychological puzzle. Prof. Jowett's practical proof of approbation was inversely proportionate to his expressed disapprobation; while showing, in an extremely exceptional way, if not his agreement with the Synthetic Philosophy, yet his appreciation of it, he described its author as one of the Tuppers of Philosophy."

This is but one of the many instances which have convinced Mr. Spencer that, if words are misused in small and indifferent matters, they will be misused in important ones. He deems it, indeed, folly to suppose that those who, when trivialities are in question, use stronger words than are called for, will suddenly become judicial in their speech when the things discussed are momentous. Are we, then, to make our talk prim, and exact, and, consequently, dull? Shall we rob conversation of its salt by weighing and scrutinizing our words before we utter them, to see that they do not go beyond the truth? Mr. Spencer would say that the question itself illustrates the randomness of thought which exaggeration also exemplifies. What he would contend for is it that words which truly express the fact should be used in all cases where the obvious intention is to express facts; not at all that words should be used in this way when there is an obvious intention to overstate, with a view to cause amusement. The humor of exaggeration is increased in effect when it comes from the mouth of one who ordinarily uses words appropriately.

Just as exaggeration is frequent in familiar speech, so, in Mr. Spencer's opinion, does the world at any given moment err by excess or defect in its judgments of men. In a short paper on the subject we are reminded that judgments are determined less by intellectual processes than by feelings; and that feelings are swayed this way or that way largely by personal likes or dislikes, or by the desire to express views that are in fashion, or have, for the moment, the weight of authority. Hence some mode of discounting current opinions is pronounced desirable. Mr. Spencer thinks that some guidance may be obtained by observing the oscillations of opinions and noting the stage in their oscillations which at the time being they have reached. That such oscillations do in fact occur seems indisputable. All movement, indeed, is rhythmical—that of opinion included. "After going to one extreme a reaction in course of time carries opinion to the other extreme, and then comes eventually a re-reaction. This is clearly observable in the case of reputations. Time was when the authority of Aristotle was supreme and unquestioned. Then came Bacon and the reform in philosophy which he initiated, the result being that the reputation of Aristotle waned, and the reputation of Bacon became great. In recent days the over-estimation of Bacon has been followed by a recoil, ending in an under-estimation—one cause being that men have compared his ideas with those of our time, instead of with those of his own time. Meanwhile the repute of Aristotle has been rising again, and now seems likely to become undue. This rhythm is conspicuously illustrated in the case of Shakespeare, who, highly appreciated by contemporaries (as witness Ben Johnson's lines), fell afterward into neglect, and then, during the present century, has been continually rising, until now his position is so high that criticism is practically paralyzed, and societies occupy themselves with the minutiæ of his sentences."

Mr. Spencer thinks that we may usually form some idea of the position in which we stand with reference to this rhythmical movement. In other words, we may recognize that neither extreme of the judgment on a man is true, and then, looking at the aggregate evidence, may judge whereabouts in the oscillation we are at the time being. Applying this method of orienting ourselves to Shakespeare, Mr. Spencer suggests that "inspection of the rhythm may lead us to suspect that the reputation of Shakespeare is at present too high. The judgment of his devoted admirer, Ben Johnson, who, when told that Shakespeare never blotted out a line, remarked that he would have done better to blot a thousand, is probably nearer the mark than the judgment now current, which implies the belief that everything he wrote is good. To any one unswayed by fashion, it is manifest that amid the great mass of that which is supremely excellent there are many things which are far from excellent." An example of the oscillation of opinion with regard to authors is drawn from our own day. "Early in the seventies the reputation of George Eliot reached its zenith. Soon afterwards it began to decline, and some few years ago had fallen to its nadir. Recently a reaction set in. Inspection of these movements will make it clear that if the estimate of thirty years ago was in excess, that of five years ago was in defect, and that, hereafter, her rank will be considerably higher than it is now."

In some notes on "A Few Americanisms," Mr. Spencer says that he has often been vexed by certain misapplications of words that are common in the United States. He singles out for animadversion the use of the word "claim" instead of "say," or "assert," or "affirm," or "allege," for example—"I claim that he knew all about it before he made the bet." It seems that the abuse has lately made its appearance in English journals of repute, including the London *Times*. A monthly magazine furnishes Mr. Spencer with a double example. An English critic and the American writer whom he criticises both pervert the word in the space of three sentences. Speaking of the Cubans, the one says: "The claim that they are not capable of governing themselves has not been established in the writer's experience;" and the other says: "It is not intended in this description of affairs to claim that the Cubans are without faults." Mr. Spencer pronounces this misuse inexcusable, "because there are sundry words serving rightly to express the intended meaning, while the word employed does not express it. A thing claimed is a thing which may be possessed; but one who *claims* that A behaved better than B implies possession in no sense, either actual or potential." Another linguistic outrage committed by business men in America is strongly reprobated. Mr. Spencer cites such examples as "the company have leased the new line and will *operate* it," "the cost of *operating* the factory has been so and so." We are reminded that these words replace the words "work" and "working," words which, though themselves open to objection, have not the vice of mere pedantry. Another corruption common in American speech is pronounced no less reprehensible. We refer to the use of "on" in place of "in." "I met him on Broadway," "I found him on the cars." What Mr. Spencer complains of here is the deliberate abolition of a distinction which in good English is uniformly observed. "The word 'in' implies enclosure, more or less decided, 'in a box,' 'in a carriage.' The word 'on' negatives enclosure, implies that the object is not shut up, and, further, that there are no restraining boundaries near it. The distinction is marked with precision in two such phrases as 'in a field' and 'on a common,' the circumstances being in all respects alike save in the presence of enclosing fences in the one case and their absence in the other case."

Those who find themselves annoyed by garrulous persons may thank Mr. Spencer for suggesting a mode of obtaining relief from the annoyance. The method is not original with him, but was invented by Socrates. In a little paper entitled "Some Questions" he tells us that tethered by ill health to the South of England he was usually accompanied in his daily drives by two ladies, and that, finding himself unable to bear continuous conversation, he learned how to put a check on this by asking one question or another not to be answered without thought. He thus acquired the habit of setting problems in the form of interrogations, partly by way of gauging the knowledge of young people and partly by way of exercising their reasoning powers. We learn that one of the simplest inquiries which was sometimes answered was: "How happens it that sheep, rabbits and hares have their eyes on the sides of their head, while cats and dogs have their eyes nearly in front?" Others are cited to which the replies are less obvious. For instance: "How is it possible for a lark while soaring to sing for several minutes without cessation? What is the reason that in hilly districts the roads are deep down below the level of the fields, whereas in flat districts they are on a level with the fields? Throughout the country, especially in its less frequented parts, the by-roads and sometimes even the main roads have strips of greensward several yards wide on either side of the part used for traffic. In what manner did these strips originate? Cows and horses drink in the same way that we do, whereas dogs and cats drink by lapping. Whence arises this difference of habit? Why does a duck waddle in walking? And what is the need for that trait of structure which causes the waddle? How is it that a bulldog is able to retain his hold for a longer period than other dogs?" Again: "Rookeries are nearly always close to human dwellings, usually always at some side. Rooks seem to gain nothing from this proximity, but daily fly far away to their feeding grounds. Moreover, they persist in thus breeding in the trees around houses, though annually many of their young are shot as soon as they can fly. What circumstances have led to this establishment of a home apparently so unfit?" Once more: "In rambles or drives throughout the country we see few blackbirds or thrushes in the open fields, but we see more as we approach houses, especially good houses, even in parts of the year when there are no temptations from the fruit gardens. Why is this?" Mr. Spencer says that the startling revelations made by the attempted answers to these questions were not that the answers were wrong, but they betrayed no conception of a relevant cause. Then again, answers were suggested which were utterly indefinite, even if relevant. It was manifest that minds in such states as were disclosed by the answers would be seed-beds for superstitions.

Two papers on "Style" will be found especially worth reading, one because of the comments on certain supposed masters of good English, the other because of the light it throws on the author's own diction. Are a classical education and a study of the best models essential to the acquirement of a good style? Most persons would answer off-hand in the affirmative, forgetting that neither John Bright nor William Cobbett, nor Benjamin Franklin, nor Thomas Paine received a classical education. Mr. Spencer insists that the current impression on the subject has no foundation. "The great mass of those who have had the discipline which a university gives do not write well. Only here and there in this large class may be found one who is said to have a fine style; for the rest, their style is commonplace, when not bad." The fact is recalled that in "The Study of Sociology" the author, after giving some samples of incoherent English written by a Prime Minister, a Bishop and a head master, proceeded in the appendix to subject to analysis two sentences quoted with approval by Matthew Arnold from Addison. No fewer than six faults in the seven lines quoted from Addison were pointed out. In one of the papers before us the following sentence from an essay by Matthew Arnold is quoted: "There can be no more useful help for discovering what poetry belongs to the class of the truly excellent, and can, therefore, do us most good, than to have always in one's mind lines and expressions of the great masters and to apply them as a touchstone to other poetry." After noting that the phrase "useful help" conceals a pleonasm, Mr. Spencer indicates other defects, and suggests that, to convey the intended meaning, the sentence should have run: "There can be no better helps for discovering what poetry is truly excellent and can, therefore, do us most good than lines and expressions of the great masters kept always in mind and applied as touchstones." A good many words are hereby saved, and the meaning is definitely expressed.

In an essay on "The Philosophy of Style," published many years ago in the *Westminster Review*, one of the conclusions set forth by Mr. Spencer was that words of Anglo-Saxon origin are more effective than words of Latin origin. Such being the author's belief, it ought to have been specially operative on his own style. He tells us, however, that when revising recently "First Principles," he was struck by the fact that the belief had not been at all operative, the language used in that work being markedly Latinized. Mr. Spencer finds the comparative absence of influence exercised by this belief explicable enough now when he remembers how little he has been guided by other conclusions set forth in the essay named and both then and now strongly held. They have never been present to him when writing, and, consequently, their effect upon his diction has been extremely small. The general traits of his style have remained unchanged, notwithstanding his wish to change some of them. He accepts, therefore, as true the French saying, "The style is the man;" in other words, style is organic. In the essay to which we have referred Mr. Spencer entirely ignores those characteristics of style which give quality, distinction, color or rhythm. In his own diction he has never aimed at the attainment of such traits. "The thought of style considered as an end in itself has rarely if ever been present; the sole purpose being to express ideas as clearly as possible, and, when the occasion called for it, with as much force as might be." With regard to some reputed masters of English, Mr. Spencer says:

"I have been repelled by the ponderous involved structure of Milton's prose; while, on the other hand, I have always been attracted by the finished naturalness of Thackeray. From the applause of Ruskin's style I have dissented on the ground that it is too self-conscious—implies too much thought of effect. In literary art, as in the art of the architect, the painter, the musician, signs that the artist is thinking of his own achievement more than of his subject, alway offend me." Clarity and conciseness, with the timely addition of energy, are the only qualities of style which Mr. Spencer has kept in view. To what extent is conciseness effected by the practice of dictation? Mr. Spencer's testimony is as follows: "Up to 1860 my books and review articles were written. Since then they have all been dictated. There is a prevailing belief that dictation is apt to cause diffuseness, and I think the belief is well founded. It was once remarked to me by two good judges—the Leweses—that the style of 'Social Statics' is better than the style of my later works; assuming this opinion to be true, the contrast may, I think, be ascribed to the deteriorating effect of dictation. A recent experience strengthens me in this conclusion. When finally revising 'First Principles,' which was dictated, the cutting out of superfluous words, clauses, sentences and sometimes paragraphs, had the effect of abridging the work by fifty pages—about one-tenth." M. W. H.

A Suggestive Book on Education.

We imagine that few readers will accept all of the conclusions set forth in the volume entitled *Education and the Larger Life*, by C. HANFORD HENDERSON (Houghton, Mifflin & Co.). Even those, however, who dissent from some of the author's views, will recognize the clearness and force with which they are expounded, and will be constrained to reconsider carefully the grounds for their own differing opinions. They will thus be indebted to the author for stimulating them to think for themselves upon many subjects concerning which we are apt to adopt the current notions without independent inquiry. Especially useful will be found that part of the work which deals with universities. Before noting, however, what Mr. Henderson has to say on this topic, we would direct attention to some of his remarks in the chapter which treats of the education of youth.

In high schools and the so-called classical schools, for example, should children attempt to learn several languages besides their own? In our author's judgment the saner plan is to be as temperate in the matter of language as one should be in food and drink. "English has always the highest claim, since it is the medium of our own daily expression, and the store house of our own most cherished traditions. But, after this claim has been amply satisfied, one may profitably take up a second language, preferably a modern one, and follow it to the point of usability." The author shares Hamerton's doubt whether the average man can ever make any language except his own a true medium for his thoughts. He holds, however, that a youth may in four years gain a fair command of one modern language besides his own, but this linguistic task is as large as the high school ought to undertake. With regard to mathematics, Mr. Henderson thinks that in four hours per week during four years it is entirely possible to cover plane and solid geometry, elementary algebra and plane trigonometry. Arithmetic is a separate study he would omit altogether from the curriculum of both the lower school and the high school, on the ground that "it is better taught by implication in the gymastic and Sloyd, and also in the geometry and algebra."

All the knotty problems of arithmetic can be better solved by algebra, and all the simpler operations can be taught more effectively as they are met in daily school experience. History Mr. Henderson would have studied in the chronological order, which proceeds, of course, from the Greek and Roman period to mediæval and modern times. As to the way in which Sunday should be spent, our author's rule is very simple. It is this: "Never do anything on Sunday so stupid that you would not be willing to do it on Monday, and never do anything on Monday so wicked that you would not be willing to do it on Sunday." This rule "cuts out dull sermons and squeaky organs, and singing through your nose out of tune, and ugly churches, and sanctimonious books and phrases, and cant, and hypocrisy, and much else that is unbeautiful and irreligious in our present mode of spending Sunday." On the other hand, from the occupations of Monday he quite as resolutely cuts out "sharp bargaining and doubtful business practices, and degenerate books, and unclean plays, and much else that is a human desecration." As for going to church on Sunday, our author thinks that the practice is of great advantage for children, provided it is made a delight instead of a duty, and provided the clergyman is a good man. It seems to him that a parent ought to scrutinize with great care the quality of the clergymen who presume to minister to the spiritual needs of his children. With even greater care he ought to scrutinize the curious material which, with the best intention in the world, and, frequently the worst preparation, offers itself for service in the Sunday schools. To permit persons to teach in the name of God on Sunday who would not be permitted in the name of the town to teach during the week is a shocking form of irreligion."

To the question, How children and youth should spend their long summer vacation to avoid actual deterioration, our author replies that "the ordinary summer hotel and boarding house are the very last places for children, and even at one's own country place, stablemen and ignorant house servants are the last companions for them." Mr. Henderson would not deny that some very estimable people board, but "the majority of those who board are not noble, and are not suitable companions for a child. They have permanently or temporarily thrown over social responsibilities, and are out of touch with the more serious and beautiful life which comes to flower only in a home. No one who has watched the treatment of children in hotels, the way they are trifled with, the alternate coaxing and bullying that they receive, the frivolous and self-conscious attitude toward life that is cultivated, can regard such an environment as commendable, or even permissible." As for servants, if the class be taken as a whole, our author looks upon it as socially the least desirable and most unsound class in the community. This he believes because the servant class is of all our laboring classes the most deficient in democracy and self-respect. "This is particularly true of the men. Many women believe themselves forced into domestic service because they have not been trained for something better, and, above all, they fall into it because they have not had the will and character to work out a sounder and less slavish scheme of life. But a man has greater opportunities, and having these, is the more accountable. To be acceptable as a servant, he must have a certain amount of intelligence and address, a certain appearance and physique. To be permanently successful, he must add to this honesty and reasonable faithfulness. These qualities fit a man for something better than being ordered around by other people, his superiors, perhaps, only in the matter of bank accounts. These qualities fit a man for something better than servility. Here in America they open the door to any number of self-respecting, independent occupations. When in the face of these opportunities, a man elects to be a servant, and adds to it a willingness, even an eagerness, to exhaust ingenuity itself in quest of fees, it stamps him at once as a person of very unsound outlook on life, and a most unfit companion for boys and girls."

In a chapter on universities, the author begins by reminding us that their precise place in the American system of education is not yet fixed. It is not fixed anywhere, although in Switzerland there is a relatively close approach to a definite reconcilement of university traditions with democratic purposes. In England a democratic impulse originating in the universities themselves has prompted the attempt to diffuse the higher education, or a smattering thereof, by the process of so-called university extension. In Germany the university is democratic to this extent, that it is open to all classes alike, provided they can bring a somewhat high order of intellectual equipment. In the United States there are several quite distinct types of universities. "The older universities, with their eyes more steadily fixed upon the traditions of the past than upon the requirements of the present moment, are still touched with mediævalism. The newer universities, and especially those of the West, show more democratic tendencies. Some of the latter are still hampered by the personal whims and prejudices of their founders, but time will probably remove these disabilities. Between these two extremes we have the greatest of our present American universities, institutions like Harvard, which have the tremendous impetus of a glorious past, and a firm hold upon the present." Our author thinks, however, that not one of our representative universities has yet seized upon the full idea of democracy, to wit: that "the university is the process of manhood and womanhood, and, as such, should be open to everybody, and is called upon to serve all in the smaller or greater measure of their needs rather than in the prescribed measure of its own elaborate requirements.

"The thought has still to take root that the sole function of a university is to render social service, not the exclusive service which it is pleased to formulate, but that general human service which represents the carrying out of the social purpose." To that end Mr. Henderson would have examinations for entrance abolished. He starts with the assumption that the fundamental aim of a university is "to offer opportunity for study in all departments of human inquiry, in philosophy, language, history, mathematics, science, art, law, medicine and theology." He goes on to maintain that "to *offer* this opportunity well is the sole function of the university, and to *use* it well is the sole function of the student. Neither member of the joint alliance may properly interfere with the function of the other. The responsibility of artistic, effective presentation rests with the university. The responsibility of sound scholarship rests with the student." Mr. Henderson denies that it is necessary to build walls and to dig ditches about the courses of study. These courses are attractive only to those who have some taste in that direction and some power of assimilation. "It is of so great importance to no one as to the student himself that he shall only undertake work for which he has adequate preparation, and in which there is reasonable hope of success. It is not necessary to make laws against swimming the Hudson until one has passed a searching examination in the natatorium." Suppose, for example, that all the courses in mathematics were thrown open to the public, what would happen? The public has never shown an undue greediness for mathematics. "It is altogether improbable that any student would enter the course in calculus, pay the fee, if there be one, and day after day attend the lesson, unless he had done sufficient preliminary work to make the course intelligible, and to give him some hope of success." It is not necessary in public libraries to lock up La Place's "Méchanique Céleste." Neither is it probable that any young man or woman would attempt the course in second-year French or second-year German if she or he had not done the first-year work.

Mr. Henderson contends that to throw wide open the doors of universities would be much easier than most people suppose. "The only change in the curriculum that would have to be made would be to see that all the departments of study offered initial as well as advanced work. This plan would not be revolutionary. Already the universities offer initial work in all unusual departments of study such as Hebrew or Sanskrit, and even in modern languages and in science. It would require a very slight extension of the curriculum to make it possible for any one, man or woman, young or old, full student or partial student, to go to a university and begin work in any department of study, and to carry it just as far as individual need might require." Such universality of purpose, process and service, our author conceives to be the true function of a university. In his opinion, nothing short of this is a realization of the supreme social purpose, namely, the making the best that is possible out of every single individual.

As our author speaks from personal experience at Zürich, it is interesting to hear what he has to say about the advance made toward his own ideal by that Swiss university. In Switzerland, every graduate of a gymnasium or classical school may enter a university without further examination. While, moreover, in many of the German universities, residence is prescribed, there is in Switzerland herein, as in everything else, the utmost freedom. The student remains for as long or as short a period as he chooses, several years, or several weeks. The degree is conferred for qualification, not for any amount of mechanical compliance. As there are no entrance examinations, so there are no prescribed studies, and there is no time requirement. Our author assures us that "one who has tasted this open freedom, and has experienced the delight of working purely for the work's sake, finds the walls and hedges built around American education sadly irksome."

Of the University of Zurich, where our author studied, we are told "the hours were long, but they were voluntary. You came and went at your own convenience. The professor was at hand, and his assistants. The artisans were in the workshop, and ready to serve. The lectures were in progress at all hours. At the beginning of each semester, and for two weeks thereafter, all courses were open. The student was free to attend as many courses as he cared to and to judge whether they were meat for him or not. At the end of the two weeks the students were expected to know what courses they wished to take, and to enter upon them, and pay the required fees. The fees were very small, amounting in the case of lecture courses to only one dollar per semester for each hour of lecture a week. The student was not obliged to continue a course already begun. If he had made a mistake, or if the lecturer proved dull and unhelpful, the student was at perfect liberty to drop out and use his time to better advantage elsewhere." In a word, the function of the university was to present knowledge. It was yours to select and assimilate. The requirements for a degree were specific, but perfectly reasonable. The candidate selected his major study, and in his own way, and at his own convenience, worked out some original problem in it. When the work was completed it was presented to the head professor of the department, and, if it were acceptable to him, the candidate was allowed to come up for the examinations, of which the most important was on the major subject.

Mr. Henderson thinks that the Swiss method, with very little adaptation, may well serve as a model for the freer university which is to be the last turn in the formal process for carrying out the social purpose. He believes that the doing away with entrance examinations would be a great benefit to the university itself. In his opinion, it would be wholesome for the university teachers to put their whole energy into artistic work, into the work of presenting their subjects just as clearly and well as they possibly can. As things are now, "the university teacher is characterized by a knowledge of his subject rather than by his art in presenting it." Nor does the art of the university teacher end with presentation. "In addition he has an immense field in the way of helping individual students, explaining, illustrating, simplifying; and a still more important field in the matter of strengthening the inner impulse, the motive power of the student's life. This triple task is quite enough, and it is one into which a sturdy, red-blooded man would throw his whole heart. The task is one of social service, and it has about it the joy and refreshment which come from rendering social service."

It is, in fine, our author's conviction that, when the university fails to reach the masses, fails to touch their lives with genuine culture and aspiration, it fails in a very grave social trust. In the full sweep of those newer democratic forces which are to-day enkindling the hearts of men, the university of the old régime will either be renovated or supplanted—renovated, if it embrace the more comprehensive purpose; supplanted, if it does not. Mr. Henderson, of course, does not anticipate that the doors of American universities will forthwith be flung open to all comers. He recognizes, on the contrary, that "those who are satisfied with the Grecian plan of life, a seeming excellence made possible by a foundation of human slavery and this, mark you, is also, at present, the American plan and practice—those who are satisfied with this plan, and who are willing to believe that they profit by it, cannot be expected to enter with any great degree of enthusiasm upon the work of giving up privileges and assuming common duties." It is submitted, however, that "there is but one privilege which a man may properly cling to. It is the privilege of doing a man's share in the necessary toil of the world, so that other men may have men's shares in the leisure and delight of the world. It is this spirit which will make the university available as the process of the whole."

Why the Boss of the Web Hangs Head Down.

From the Chicago Tribune.

Most spiders build wonderful traps or homes of finely spun web. These webs are stretched in all kinds of places. Out in the fields they almost carpet the grasses and weeds with a spread intended to catch the teeming insect life. They are thrown across the roadways and in the open glades in the woodland.

Every one has seen the great round fat bodies of the spiders as they hang motionless in the centre of these large circular webs. Every child has seen the black and gold fellows which make huge scrawling lines of white across the webs in the garden corners and among the grape vines. The children call them "writing spiders," and really the white lines bear a close resemblance to latin writing when viewed at a short distance.

Every student and observer of nature soon learns that the spider remains in the centre of the web that it may feel the slightest motion caused by any luckless insect which has been caught in the sticky substance. Now, if one will look closely at the spider he will see that it hangs head downward.

One day, by suddenly frightening a spider, a man learned the secret of its constant position upside down in the web. It dropped head down and stopped when about half way to the ground and swung slowly to and fro from the end of a long thread of web. If it had been head up in the web it would have turned a somersault and the web would have been broken. After the spider had swung at the end of its web for some time it thought all danger had passed, and turned and climbed up again. It rolled the web thread up with its forelegs, and then threw it to the ground. This was evidently done to keep it from becoming entangled with any of the web proper or with grass or weeds nearby. Any one who has touched a web knows that it is sticky and hard to ravel when once tangled. Certainly this bit of instinct is an [illegible] the spider's brain.